Remarks

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks. Claims 1-26 remain pending in the application. Claim 1 has been amended.

Patentability over the cited art

Claims 1 and 16-17 have been rejected under 35 U.S.C. § 103 over Schiffbauer et al., U.S. Patent 5,939,986 [hereafter Schiffbauer '986], in view of Story. Claims 2-9 and 18-21 have been rejected under 35 U.S.C. § 103 over Schiffbauer '986 and Story, in view of Weinstein and Kirtley. Claim 22 has been rejected under 35 U.S.C. § 103 over Schiffbauer '986, Story, Weinstein and Kirtley, in view of Schiemann. Claim 10 has been rejected under 35 U.S.C. § 103 over Schiffbauer '986, Story, and Kirtley, in view of Sivakumar. Claims 11 and 23-24 have been rejected under 35 U.S.C. § 103 Schiffbauer '986 and Story, in view of Kirtley. Finally, claims 12-15 and 25-26 have been rejected under 35 U.S.C. § 103 over Schiffbauer '986, Story and Kirtley, in view of Spencer. Applicant respectfully traverses these rejections.

In various of the described embodiments in the specification of the present application, a loop-antenna transmitter is mounted on or about mobile machinery or at a stationary location to generate a magnetic field defining a danger zone around the machine or stationary danger zone. (See, present application at page 10, line 18 through page 11, line 12.) Personnel wear a non-directional proximity receiver 100 (shown in Figure 1A) that detects proximity to a hazard based on receiving the loop-antenna transmitter's signal. Among other features, the non-directional proximity receiver itself includes a further transmitter 140 that transmits an encoded danger indication signal to a separate data link receiver 150 shown in Figure 2. This way, when the person wearing the proximity receiver enters

the zone defined by the directional signal from a loop transmitter mounted on hazardous equipment or stationary location, the proximity receiver transmits an encoded danger indication signal to a separate data link receiver that can provide a warning to an operator of that equipment or shut down the equipment. (See, the present application at page 4, lines 17-26.)

Claim 1 is amended herein for clarity. Amended claim 1 recites, "means for transmitting in response to a determination that the received signal indicates proximity to an attendant hazard an indication signal indicating that a person wearing said receiver is in a hazardous area (emphasis added)." Claims 2-17 and 23-26 depend from claim 1 and therefore also require this recited element.

Claim 18 is directed to a "non-directional proximity receiver," which is recited to comprise:

> a comparator determining whether a received signal indicates an attendant hazard;
>
> an encoder encoding said indication of an attendant hazard in response to a determination that the received signal indicates an attendant hazard; and
>
> a transmitter transmitting said encoded indication.

Claims 19-22 depend from claim 18, and therefore also require these recited elements.

The "means for transmitting" recited in claim 1 and "comparator," "encoder" and "transmitter" recited in claim 18 are not taught or suggested by any of the cited references, whether taken individually or in combination.

In particular, Schiffbauer '986 describes a hazardous warning system, in which a receiving means 26 includes a ferrite loop antenna 50. As discussed in the Background section of this application, the receiver with the single ferrite loop antenna described in Schiffbauer '986 produces a signal indicating the level of the received signal in only a single direction – along the axis of the antenna. (See, Specification at page 2, line 29 through page 3, line 7.) However, the receiver circuit

shown in Figure 3 in Schiffbauer '986 does not include a transmitter. The transmitter 28 shown in Figure 2 that generates the magnetic field to define a potentially dangerous area (Schiffbauer '986 at column 4, lines 38 through column 5, line 22), does not transmit a danger indication signal in response to any determination from a received signal that the receiver is in proximity to the dangerous area. Accordingly, Schiffbauer '986 does not teach or suggest the recited "means for transmitting" of claim 1, or the comparator/encoder/transmitter of claim 18.

The other cited references also fail to teach or suggest that the proximity receiver include a transmitter to transmit a signal (e.g., to other devices) in response to the proximity receiver determining from a received signal that it is in proximity to a dangerous area. For example, Kirtley shows a transmitter 8 mounted above a door, and receiver 14 in a forklift truck. (See, Kirtley in Figure 1, and column 6, lines 3-45.) The receiver circuit (shown more fully in Figure 3) includes a buzzer to indicate it is proximate to the door-mounted transmitter. But, Kirtley does not teach or suggest providing a transmitter in his receiver circuit to transmit an indication signal in response to determining that the signal received from the door-mounted transmitter indicates proximity to a hazard.

The remaining cited references also fail to teach or suggest that a non-directional proximity receiver include a transmitter to transmit an indication signal in response to determining that a received signal indicates proximity to a hazard.

Because the various references all lack any teaching or suggestion of the "means for transmitting" in claim 1 and the comparator/encoder/transmitter in claim 18 that transmits in response to determining a received signal indicates proximity to a hazard, claims 1-26 clearly are patentable over these references.

Conclusion

The claims as amended herein should be allowable. Such action therefore is respectfully solicited.

Respectfully submitted,

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